A STUDY TO ASSESS THE EFFECTIVENESS OF SELECTED EXERCISE IN REDUCING DYSMENORRHOEA AMONG ADOLESCENT GIRLS

Ms. Anitha M* I Dr. Suraj J Masih**

**Research Scholar in Himalayan University, Itanagar in Arunachal Pradesh, India.*

***Research Supervisor in Himalayan University, Itanagar in Arunachal Pradesh, India.*

DOI: http://doi.org/10.47211/trr.2022.v08i01.009

ABSTRACT:

A study to assess the effectiveness of selected exercise in reducing dysmenorrhoea among adolescent girls at selected school, Lucknow. ***Study objective****: (a) To assess the pre test level of dysmenorrhoea among adolescent girls in the experimental and control group(b)To assess the post test level of dysmenorrhoea among adolescent girls in the experimental and control group (c)To assess the effectiveness of selected exercise on dysmenorrhoea among adolescent girls in the experimental group (d) To find out the association between post test level of dysmenorrhoea among adolescent girls with their selected demographic variables.* ***Methodology****: Experimental approach and the research design was quasi experimental design used for the present study. The sample for the study consists of 120 adolescent girls with dysmenorrhoea, 60 in experimental group and 60 in control group and it was selected by purposive sampling techniques. Numerical Pain Intensity Scale was used to assess the level of menstrual pain of adolescent girls is both groups* ***Results****: Inferential and descriptive statistical were used to analyze the data. The pre test value of menstrual pain in adolescent girls for experimental and control group was 6.2 and 4.63 respectively. The mean post test score was 1.8 and 4.3 for experimental and control group. The comparison was done between two group by performing the independent 't' test and the value was 6.57.****Conclusion:*** *The study shows that Billig's exercise is effective to reduce menstrual pain among adolescent girls.*

KEYWORDS: *Dysmenorrhoea, Demographic variables.*

ABOUT AUTHORS:

Author, Ms. Anitha M is Research Scholar in Himalayan University, Itanagar, Arunachal Pradesh, India. She has attended various Seminars and conferences.

Author, Dr. Suraj J Masih is Ph.D. Guide at Himalayan University, Itanagar, Arunachal Pradesh, India. She is active researcher with many publications in her name. She has attended and organised various National and International conferences.

INTRODUCTION:

Menstruation is a basic female physiological process, capable of affecting the several other metabolisms within the body. Women may face several difficulties during their menstrual flow. In some women the effects are aggressive than others. Menarche often associated with problems of irregular menstruation, excessive bleeding and dysmenorrhoea. Among these, dysmenorrhoea is one the common problems experienced by many adolescent girls.

The risk factors for dysmenorrhea are age less than 20 years, nullipara, heavy menstrual flow, smoking, and attempts to lose weight, physical activity disruption, depression and anxiety. Most of the adolescent girls experiences intolerable pain and incapacitating. Since stress can increase the activity of the sympathetic system leading to increased uterine muscle contraction, lead to dysmenorrhoea. Exercise can thus reduce the activity of the sympathetic system, resulting in a decrease of dysmenorrhoea symptoms**.** Regular exercise and physical activities have been introduced as effective methods for prevention and treatment of dysmenorrhoea.

MATERIAL AND METHODS:

Research design:

Quasi experimental design.

Setting of the study:

Government inter school, Lucknow

Population and sampling:

The population for the study were adolescent girls who were studying in government inter school, Lucknow

Sample:

Adolescent girls with dysmenorrhoea

Sample techniques and sample size:

Purposive sampling technique was used for this study. It Consist of 120 adolescent with dysmenorrhoea out of 120 samples 60 were experimental group 60 in the control group.

Inclusion criteria:

Adolescent girls who are have attained menarche and who in the age group between 12-16 years of age.

Adolescent girls who have regular menstrual cycle.

All adolescent girls who are having primary dysmenorrhoea and willing to participate in the study.

Exclusion criteria:

Adolescent girls who are undergoing treatment by physician for dysmenorrhoea.

Instrumental and tools of data collection:

Section A: Demographic variables and menstrual variables:

This section deals with the demographic variables such as age, body mass index, duration of menstruation, flow of menstruation, age at menarche, nature and location of menstrual pain, associated symptoms during menstruation, inference of the study.

Section B: Numerical pain rating scale:

The numerical pain rating scale is the to assess the level of dysmenorrhoea before and after the Billig's exercise.

Numerical Pain rating scale: .

Level of Pain	**Score**
No pain	0
Mild	1-3
Moderate	4-6
Severe	>7

Data collection procedure:

Data collection was carried after obtaining formal permission for from the school authority. Total 120 samples were selected on the basis of inclusive and exclusive criteria by purposive sampling techniques. Among 60 were in the experimental group and 60 were in the control group. Pre test was conducted on the first day of menstruation to assess the level of dysmenorrhoea with help of numerical pain rating scale for the both experimental and control group. Billig's exercise was given for experimental group for 5-6 times a day. Each exercise for 15 minutes on the first day of menstruation. Post test conducted for the both the group on second day evening by using some numerical rating scale

RESULT AND DISCUSSION:

The study aimed in assessing the effectiveness of Billig's exercise in reducing dysmenorrhoea among adolescent girls. The result of the study is based on the statistical analysis. The data were collected with the help of questionnaire and numerical pain intensity scale. This is quasi experimental study design.

The first objective of the study to assess the pre test level of dysmenorrhoea among adolescent girls in the experimental and control group:

In experimental group, 16 had mild pain during menstruation, 36 had moderate pain during menstruation, 8 had severe pain during menstruation in. In control group 20 had mild pain during menstruation, 34 had moderate pain during menstruation, 6 had severe pain during menstruation. There is no difference between pre test level of experimental and control group.

The second objective to assess the post test level of dysmenorrhoea among adolescent girls in the experimental and control group:

The post test level of dysmenorrhoea in the experimental group, 18 adolescent girls it not had no pain during menstruation, 32 had mild level of pain during menstruation, 10 had moderate level of pain during menstruation, none of them had severe pain during menstruation. In the control group, adolescent girls, 18 had mild pain during menstruation, 36 had moderate level of pain during menstruation, 6 had severe pain during menstruation. There is difference between post level of experimental and control group. It shows that the pain score experimental group was reduced after providing Billig's exercise.

The third objective to assess the effectiveness of Billig's exercise the level of dysmenorrhoea among adolescent girls in the experimental and control group

The effectiveness of Billig's exercises the level of dysmenorrhoea among adolescent girls in the experimental and control group. Based on the objectives that the mean score of pre test is 6.2 and post test is 1.8. The calculated't' value is 7.21 at 29 degrees of freedom at 0.05% level of significance, which is greater than that of table value (2.045). It shows that there was a significant difference between pre test and post test score which implied that was a significant reduction in menstrual pain after providing Billig's exercise.

Based on the objectives the mean of pre test of control group is 4.63 and that of post test is 4.43. The calculate 't' value is 0.3744 at 29 degrees of freedom and at 0.05% level of significance, which is less than table value. This show that there is no significant difference between pre tests and post test pain score among control group, there is an appreciable difference in case of experimental group with Billig's exercise.

The post mean value of dysmenorrhoea in experimental group, pain assessment during menstruation in experimental group was 1.8 and that of control group were 4.43. The calculated 't' value was 6.57 at 58 degree of freedom and at 0.05% level of significance which is greater than table value 1.98, It shows that the pain score of experimental group was reduced after providing Billig's exercise. Hence alternative hypothesis is accepted.

The fourth objectives of the study to find out the association between post test levels of dysmenorrhoea among adolescent girls with their selected demographic variables:

The association between levels of dysmenorrhoea among adolescent girls with selected demographic variables in experimental group and control group. The result revealed that there is no association between the level of dysmenorrhoea with selected demographic variables such as age in years, education, religion, BMI, age at menarche, duration of pain, frequency of menstruation, duration of menstruation, flow of menstruation, interference, location of pain, associated symptoms, psychological disturbance among adolescent girls in experimental group and control group.

CONCLUSION:

This study shows significant effectiveness of Billig's exercise in reducing pain during menstruation among adolescent girls in experimental group. Billig's exercise is more effective in reducing pain during menstruation among adolescent girls than pharmacological management.

REFERENCES:

1. Anil. K. Agarwal, A study of dysmenorrhoea during menstruation in Adolescent girls. Indian Journal of community.2010: 35(1) 159-164.
2. AtchutaKameswara Rao, (Dysmenorrhoea in different setting; are the rural and urban Adolescent girls perceiving and managing the dysmenorrhoea problem differently. Journal of community Medicine.2008: 33(4) 246-249.
3. Avasrala A. K. Prevalence of dysmenorrhoea in adolescent girls, Indian Journal of community medicine. 2010: Volume-33.70-72
4. Br. J Gen Pract The role of exercise in the treatment of menstrual disorders. The British Journal of general practice. 2009: page no-139-142.
5. Hung Hey Chen The self care strategies of girls with primary dysmenorrhoea: A focus group study in Taiwan Health care for women International, 2006: Volume-27.
6. Cunningham and Sheila et. Al. Dysmenorrhoea: A review of literature- Nursing Standard Academic Journal,.2011:Vol-25 (44).
7. Davis, A. R. Primary dysmenorrhoea in adolescent girls, Journal of paediatric, Adolescent, Gyecology2011: 3-8.
8. Daley A.J. Exercise and dysmenorrhoea, A comprehensive and Critical review of the literature. South African Journal of Obstetrics and Gynaecology.2008: Volume-18.
9. Deniz Sayine. Prevalence and predictors of dysmenorrhoea among students at university in Turkey, International Journal of Gynaecology and Obstetrics.2009: Volume-107.
10. D Scully Exercise and primary dysmenorrhoea, Journal of sports medicine,.2008: Volume 38.